SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

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Federal Aviation Administration

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http://www.faa.gov/aircraft/safety/alerts/SAIB

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you, owners and operators of **SUKHOI SU-29 airplanes** (all serial numbers), of a potential unsafe condition on the SU-29 airplane concerning the possible failure and/or cracks on the bracket attachments of the rear spar to the fuselage truss.

Background

NOTE: The following information was received through the National Transportation Safety Board (NTSB) on October 25, 2005, from the Sukhoi Design Bureau. The information below is presented exactly as received from the Sukhoi Design Bureau without change. The Sukhoi SU-29 is not a type certificated product in the United States. The information in this SAIB is strictly informational in nature.

An SU-29 aircraft (serial number 79-02, number in the USA 28SU) had the left bracket of the attachment of the rear spar to the fuselage truss found broken and a crack was found on the right bracket. (ref. the Su-29 Maintenance Manual, book 1, section 057.00.00, p.3/4, picture 1, pos.19).

SUKHOI states that this is a unique case of this bracket failure and crack formation.

The total flight experience of the aircraft was 930 hours and 1286 landings at the time of identification of this damage. The number of aerobatic flying hours was not recorded.

SUKHOI also states that the absence of flying hours accounting is a direct breach of the SU-29 Maintenance Manual (book 1, section 005.00.00). This has led to the following: at the total flight experience of 930 hours the real flying time exceeded the aircraft assigned life of 1250 hours, which accordingly caused the bracket damage.

Recommendation

We highly recommend that you, operators of all models of the SU-29 airplane, before the next flight, accomplish the follow SUKHOI's procedures:

- "Fix the spars with screw clamps and check immovability of the stick. Neither clearance, nor hard movement in the lateral channel can be acceptable.
- Remove a wing from the aircraft. Inspect the wing attachment bolts. Inspect the wing fastening assemblies on the spars 1 and 2. Inspect the spars 1 and 2 in the fastening assemblies areas. Neither cracks, nor layering are acceptable.
- Pay your special attention to the assemblies of the spar 2 in the area of their attachment to the aircraft rib.
- Check tightening of the bolts that fix the wing lugs to the spars 1 and 2. Turning of the bolts heads with a wrench or by hand cannot be acceptable.
- Provide a magnetic test of the fuselage truss in the area of the wing fastening assemblies. No cracks are acceptable.

- In case any defects are discovered, stop flights of these aircraft and provide photographing (or sketching) along with such defect description. This should be submitted to SUKHOI Design Bureau (SDB) for decision taking. Submit to the address shown below.
- Results of these checks should be included into the aircraft logbook (part 1) and forwarded to Sukhoi Design Bureau. Please pay your attention to the necessity of aerobatic hours accounting and their placement to aircraft logbook."

For Further Information Contact

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For copies of SU-29 Maintenance Manual Contact

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